Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the

application.

**Listing of Claims:** 

1. (Currently amended) An image interpolation method, comprising:

acquiring a first image and a second image;

computing a matching between the first image and the second image by

detecting corresponding points which correspond between the images;

quantizing the range of attribute values of the corresponding points in the first

image and second image in a relatively coarse manner;

calculating difference data on the attribute values of the corresponding points

based on the quantized range of attribute values; and

generating a corresponding point file based on the matching, where the

corresponding point file comprises positional information on the corresponding points

and the difference data on attribute values of the corresponding points.

2. (Original) An image interpolation method according to Claim 1, wherein the difference

data on attribute values comprises a difference between an attribute value of a point in

the first image and an attribute value of a corresponding point in the second image.

-2-

Art Unit: 2625

April 28, 2006

3. (Previously amended) An image interpolation method according to Claim 1, wherein

said attribute values of the corresponding points comprise color values of the

corresponding points.

4. (Currently amended) An image interpolation method, comprising:

acquiring a corresponding point file which describes a matching result of a first

image and a second image wherein the corresponding point file comprises positional

information on points which correspond between the first image and the second image

and difference data of attribute values of points which correspond between the first

image and the second image, wherein the difference data of attribute values comprises

data obtained by quantizing the range of attribute values of the points which correspond

in a relatively coarse manner and calculating difference data on the corresponding

points based on the quantized range of attribute values of the corresponding points; and

generating an intermediate image based on the first image and the second image

by performing interpolation based on the first image and the corresponding point file.

5. (Currently amended) An image interpolation apparatus, comprising:

an image input unit which acquires a first image and a second image; [[and]]

a matching processor which computes a matching between the first image and

the second image and which generates a corresponding point file by detecting points

that correspond between the images, quantizes the range of pixel values of the

-3-

Art Unit: 2625

April 28, 2006

corresponding points in the first image and second image in a relatively coarse manner,

computes difference data of pixel values on the points that correspond between the

images based on the quantized range of pixel values, and generates a corresponding

point file,

wherein the corresponding point file comprises positional information on the

points that correspond between the images and the difference data of pixel values on

the points that correspond between the images.

6. (Original) An image interpolation apparatus according to Claim 5, wherein said

matching processor detects points on the second image that correspond to lattice points

of a mesh provided on the first image, and based on a thus detected result a destination

polygon corresponding to the second image is defined on a source polygon that

constitutes the mesh on the first image.

7. (Currently amended) An image interpolation apparatus, comprising:

a communication unit which acquires a corresponding point file which describes

a matching result of a first image and a second image wherein the corresponding point

file comprises positional information on points which correspond between the first image

and the second image and difference data of attribute values of points which

correspond between the first image and the second image, wherein the difference data

of attribute values comprises data obtained by quantizing the range of attribute values

-4-

Art Unit: 2625

April 28, 2006

of the points which correspond in a relatively coarse manner and calculating difference

data on the corresponding points based on the quantized range of attribute values; and

an intermediate image generator which generates an intermediate image based

on the first image and the second image by performing interpolation based on the first

image and the corresponding point file.

8. (Original) An image interpolation apparatus according to Claim 7, further comprising a

display unit which displays at least the intermediate image.

9. (Original) An image interpolation apparatus according to Claim 7, further comprising a

corresponding point file storage unit for storing the corresponding point file in a manner

such that the corresponding point file is associated with the first image.

10. (Original) An image interpolation apparatus according to Claim 8, further comprising

a corresponding point file storage unit for storing the corresponding point file in a

manner such that the corresponding point file is associated to the first image.

11. (Original) An image interpolation apparatus according to Claim 7, wherein said

intermediate image generator generates said intermediate image by moving a point

within the first image according to the positional information and varying the attribute

value of the point based on the difference data.

-5-

Art Unit: 2625

April 28, 2006

12. (Original) An image interpolation apparatus according to Claim 8, wherein said

intermediate image generator generates said intermediate image by moving a point

within the first image according to the positional information and varying the attribute

value of the point based on the difference data.

13. (Original) An image interpolation apparatus according to Claim 9, wherein said

intermediate image generator generates said intermediate image by moving a point

within the first image according to the positional information and varying the attribute

value of the point based on the difference data.

14. (Canceled)

15. (Currently amended) A data medium storing a computer program executable by a

computer, the program comprising the functions of:

acquiring a first image and a second image;

computing a matching between the first image and the second image by

detecting corresponding points which correspond between the images;

quantizing a range of attribute values of the corresponding points in the first

image and second image in a relatively coarse manner;

calculating difference data on the attribute values of the corresponding points

-6-

Art Unit: 2625

April 28, 2006

based on the quantized range of attribute values; and

generating a corresponding point file based on the matching where the

corresponding point file comprises positional information on the corresponding points

and the difference data on attribute values of the corresponding points.

16. (Currently amended) A data medium storing a computer program executable by a

computer, the program comprising the functions of:

acquiring a corresponding point file which describes a matching result of a first

image and a second image wherein the corresponding point file comprises positional

information on points which correspond between the first image and the second image;

and difference data of attribute values of points which correspond between the first

image and the second image, wherein the difference data of attribute values comprises

data obtained by quantizing the range of attribute values of the points which correspond

in a relatively coarse manner and calculating difference data of the corresponding points

based on the quantized range of attribute values; and

generating an intermediate image based on the first image and the second image

by performing interpolation based on the first image and the corresponding point file.

17. (Canceled)

18. (Original) An image interpolation method according to Claim 1, wherein the

-7-

Art Unit: 2625

April 28, 2006

difference data are entropy-coded and, thereafter, the entropy-coded difference data

are stored in the corresponding point file.

19. (Original) An image interpolation apparatus according to Claim 5, wherein said

matching processor entropy-codes the difference data and thereafter stores the

entropy-coded difference data in the corresponding point file.

20. (Previously presented) An image interpolation method according to Claim 14,

wherein said intermediate image does not relate to a known frame between said first

image and said second image.

21. (Currently amended) An image interpolation method, comprising:

acquiring a first image and a second image;

computing a matching between the first image and the second image by

detecting corresponding points which correspond between the images, said matching

further comprising computing positional information for said corresponding points and

difference data on attribute values for the corresponding points, wherein the difference

data is computed using quantized attribute values obtained by quantizing a range of

attribute values of the corresponding points in the first image and second image in a

relatively coarse manner; and

generating a corresponding point file, wherein the corresponding point file

-8-

Art Unit: 2625 April 28, 2006

comprises said positional information and said difference data.